



**John Robison**  
Plant Manager

MPM Silicones, L.L.C.  
3500 WV State Route 2  
Friendly, WV 26146

T 304 652 8000  
F 304 652 8738

February 17, 2009

CERTIFIED MAIL 7006 0810 0001 6935 2073

Mr. Don Martin  
Office of Environmental Remediation  
WVDEP – Division of Water and Waste Management  
601 57<sup>th</sup> Street  
Charleston, WV 25301

Re: 2008 Annual Corrective Action Report  
MPM Silicones, LLC – Sistersville Plant  
EPA ID No.: WVD004325353

Dear Mr. Martin:

This letter report is the MPM Silicones, LLC's annual corrective action report for 2008. It is being submitted to you as specified in Module X, Section H-2 of our hazardous waste management renewal permit, which became effective on May 30, 2008.

**1. Introduction:**

The Permit requires corrective actions at the Facility for four specific areas, summarized as follows:

<b>Permit Reference</b>	<b>Corrective Action Area</b>	<b>Corrective Action Requirements</b>
G-3b	North Inactive Site	Earthen cover inspection & maintenance Semiannual groundwater monitoring
G-3c	South Inactive Site	Ground cover inspection Quarterly groundwater monitoring
G-3d	Waste Water Treatment System	Equipment inspection Surface impoundment leak rate monitoring
G-3e	No. 3 Sludge Pond and BTEX Area	Groundwater recovery well operation Quarterly groundwater monitoring

**2. Work completed during the year:**

***North Inactive Site***

Work completed during the year included inspection, maintenance and groundwater monitoring activities. The earthen cover was inspected in January, March, April, June, September and October. Gravel was added to the roadway and the roadway was re-graded in April. The annual mowing was completed in June and the diversion ditches were cleaned in November.

Semiannual groundwater monitoring was conducted in May (under the 1990 Permit) and November (under the new Permit). After the new permit was issued, Triad Engineering, Inc. was retained to assist in revising groundwater monitoring schedules and procedures to match the requirements outlined in Attachment 11 of the new permit and to train Momenive personnel on the new procedures. Sampling conducted in November followed the new procedures.

### ***South Inactive Site***

Work completed during the year included inspection, maintenance and groundwater monitoring activities. Quarterly ground cover inspections were performed in conjunction with quarterly groundwater sampling conducted in February, May, August/September and November.

After the new permit was issued, Triad Engineering, Inc. was retained to assist in revising groundwater monitoring schedules and procedures to match the requirements outlined in Attachment 11 of the new permit and to train Momenive personnel on the new procedures. Sampling conducted in the third and fourth quarters followed the new procedures.

In addition, a new monitoring well MW#2701-R was installed in September to replace MW#2701 that had collapsed and could not be sampled in August. MW#2701-R was sampled in September (within the third quarter). MW#2701 was properly abandoned in October in accordance with the requirements of 47 CSR 16-19.

### ***Waste Water Treatment System***

Work completed during the year included equipment inspection, removal of sludge from the Panic Pond, surface impoundment leak rate monitoring, sampling and reporting of sampling results for the surface impoundment leak detection sumps.

The West Primary Clarifier was shut down and inspected in May. The East Primary Clarifier was shut down and inspected in December. Sludge was removed from the Panic Pond in October.

The 1990 corrective action permit required sampling of our surface impoundment leak detection sumps if weekly average leakage rates exceeded 20 gallons per day and quarterly reporting of the sample results. Average leakage rates exceeded 20 gallons per day for some weeks during the first and second quarters, so sampling was performed and results compared to health based standards. Quarterly reports, dated April 11, 2008 and July 7, 2008, were submitted to both Region III and the WVDEP stating that no health based standards were exceeded in the sumps.

The new permit requires continued monitoring of surface impoundment leakage rates, but only requires sampling and reporting if monthly average leakage rates exceed 750 gallons per day. Daily monitoring results were reviewed weekly and monthly average leakage rates for both impoundments were less than 160 gallons per day throughout 2008.

### ***No. 3 Sludge Pond and BTEX Area***

Work completed during the year included continued operation and maintenance of groundwater recovery well #4315 and groundwater monitoring activities.

Groundwater recovery well #4315 operated throughout 2008. The pump was replaced in October to improve flow.

Quarterly groundwater monitoring was completed in February, May, August and November. After the new permit was issued, Triad Engineering, Inc. was retained to assist in revising groundwater monitoring schedules and procedures to match the requirements outlined in Attachment 11 of the new permit and to train Momentive personnel on the new procedures. Sampling conducted in the third and fourth quarters followed the new procedures.

### **3. Groundwater sampling data:**

#### ***North Inactive Site***

Groundwater monitoring results for monitoring wells NF-1 through NF-9 for the analytes specified in Condition X-G-3(b)(iv)(1) of the permit are attached.

1,1-Dichloroethane was detected in monitoring wells NF-2 and NF-8 in the second and fourth quarters at levels ranging from 2.4 to 9.65 ug/L. USEPA has not established a maximum contaminate level (MCL) for 1,1-Dichloroethane.

Benzene was detected in monitoring well NF-8 in the second and fourth quarters at levels ranging from 0.95 to 1.4 ug/L. All results were below the 5 ug/L MCL for benzene.

Chlorobenzene was detected in monitoring wells NF-2 in the second and fourth quarters, NF-7 in the second quarter, and NF-8 in the second and fourth quarters at levels ranging from 0.95 to 60.3 ug/L. All results were below the 100 ug/L MCL for chlorobenzene.

Dichloroethylene (cis-1,2) was detected in monitoring well NF-2 in the second and fourth quarters and NF-7 in the second quarter at levels ranging from 1.4 to 2.1 ug/L. All results were below the 70 ug/L MCL for dichloroethylene (cis-1,2).

Results for all other specified analytes in all wells were below detection limits.

#### ***South Inactive Site***

Groundwater monitoring results for monitoring wells 5701, 5702, 5703, 5704, 5705, and 2701-R for the analytes specified in Condition X-G-3(c)(ii)(1) of the permit are attached.

Dichloroethylene (cis-1,2) was detected in monitoring well 5704 in all four quarters at levels ranging from 2.2 ug/L to 13.5 ug/L. All results were below the 70 ug/L MCL for dichloroethylene (cis-1,2).

Benzene was detected in monitoring well 5704 in the second, third and fourth quarters at levels ranging from 6.4 ug/L to 12.5 ug/L. All results were above the 5 ug/L MCL for benzene.

Results for all other specified analytes in all wells were below detection limits.

#### ***No. 3 Sludge Pond and BTEX Area***

Groundwater monitoring results for monitoring wells 20 and 3203 for the analytes specified in Condition X-G-3(e)(vii) of the permit are attached.

Chlorobenzene was detected in monitoring well 20 in all four quarters at levels ranging from 1.4 ug/L to 2.75 ug/L. All results were below the 100 ug/L MCL for chlorobenzene.

Dichloroethylene (cis-1,2) was detected in monitoring well 20 in the first, second and third quarters at levels ranging from 2.05 ug/L to 3.55 ug/L. All results were below the 70 ug/L MCL for dichloroethylene (cis-1,2).

Results for all other specified analytes in all wells were below detection limits.

#### **4. Summary of changes made during the year:**

Corrective action requirements for the site were incorporated into the new hazardous waste management renewal permit that became effective on May 30, 2008. The following changes were made to conform to the requirements of the new permit:

- Monitoring well MW#2701 was added to the groundwater sampling program for the South Inactive Site to monitor migration toward the Ohio River. Monitoring well MW#2701-R was installed to replace MW#2701 after it was determined that MW#2701 had collapsed. MW#2701 was then properly abandoned in accordance with the requirements of 47 CSR 16-19.
- Monitoring well MW#3203 was added to the groundwater sampling program for the No. 3 Sludge Pond and BTEX Area.
- Groundwater monitoring procedures were revised to conform to permit requirements. Revisions included reduction in the volume of water purged before sampling, reduction in the number of replicate samples collected, revisions to the parameters monitored and monitoring frequencies.
- The surface impoundment leak rate threshold that triggers sampling of the leak detection sumps was changed from a weekly average of 20 gallons per day to a monthly average of 750 gallons per day.

Steve Klarman joined the site Environmental, Health and Safety staff in September and has assumed responsibility for the RCRA Corrective Action Program at the site.

#### **5. Summary of problems encountered and actions taken**

##### ***North Inactive Site***

During the April inspection it was noted that the roadway needed to have some gravel added. Gravel was added and the roadway re-graded.

##### ***South Inactive Site***

Permit condition X-G-3(c)(iii) in the new permit added MW#2701 to the groundwater sampling program for the South Inactive Site. Attempts to sample this well in late August were unsuccessful. The well was apparently plugged or collapsed at an elevation above groundwater level. Subsequent attempts to open the well revealed that the well had collapsed. The WVDEP OER was contacted in September with a request to drill a replacement well approximately 10 - 12 feet south of the collapsed MW#2701. After approval, MW#2701-R was installed and subsequently sampled in September. MW#2701 was properly abandoned in October in accordance with the requirements of 47 CSR 16-19.

### ***Waste Water Treatment System***

Surface impoundment leakage rates in excess of the 20 gallons per day threshold contained in the old corrective action permit triggered sampling/reporting of the surface impoundment leak detection sumps in the first and second quarters (see previous discussion under Work completed during the year).

### ***No. 3 Sludge Pond and BTEX Area***

Flow from groundwater recovery well #4315 had decreased over time to approximately 74 gallons per minute on average in October, occasionally dropping to 65-67 gallons per minute. The pump was replaced October 28-29. Flow improved to approximately 82 gallons per minute and has averaged 81 gallons per minute in November-December. No other problems were encountered during the year.

## **6. Projected work for next year**

### ***North Inactive Site***

Inspection and maintenance activities (annual mowing, brush and weed control, cleaning drainage ditches) will be conducted according to the schedule in condition X-G-3(b)(ii) of the permit. Groundwater monitoring will be conducted semiannually.

### ***South Inactive Site***

Inspection of the ground cover and groundwater monitoring will be conducted quarterly.

### ***Waste Water Treatment System***

We expect to shut down and inspect both UNOX reactors in 2009. Tentatively, the west reactor will be shut down/inspected in April and the east reactor will be shut down/inspected in October.

We also expect to conduct a video inspection of a portion of the process sewer and inspect the terminal manhole/neutralization pit during the plant-wide electrical shutdown that is tentatively scheduled for June.

We will continue to monitor leakage rates of the surface impoundments.

### ***No. 3 Sludge Pond and BTEX Area***

We will continue to operate groundwater recovery well #4315. The groundwater flow direction will be evaluated to verify that contaminants from the north Inactive Site, No. 3 Sludge Pond and BTEX Area are continuing to be captured by the recovery well.

Groundwater monitoring will be conducted quarterly.

As required by Condition I-I of our permit, the following certification is being made:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

If you have any questions concerning this report, please contact Steve Klarman at (304) 652-8306 or via email at [steven.klarman@momentive.com](mailto:steven.klarman@momentive.com).

Sincerely,  
MPM SILICONES, LLC



John Robison  
Plant Manager

Attachments

JR:sck

cc: Mark Leskowicz - MPM  
Steve Freed - MPM  
Jason Martin - MPM  
Sanat Bhavsar - MPM  
Talal Fathallah - WVDEP  
Bill Wentworth - USEPA - CERTIFIED MAIL 7006 0810 0001 6935 2080  
Sudhir Patel - WVDEP  
State Correspondence File

P:\RCRA\Corrective Action\REPORTS\Bi-Monthly and Annual Corrective Action Reports\2008 Annual CA Rpt.doc

EPA003004

**MPM Silicones LLC - Sistersville Site**  
**RCRA Corrective Action Program 2008 Groundwater Monitoring - North Inactive Site**

Well	Quarter	Replicate	1,1-Dichloroethane ug/l	Benzene ug/l	Chlorobenzene ug/l	Dichloroethylene (cis-1,2) ug/l	Dichloroethylene (-trans-1,2) ug/l	Toluene ug/l
NF-1	2	A	0	0	0	0	0	0
		B	0	0	0	0	0	0
		C	0	0	0	0	0	0
		D	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0
NF-2	2	A	0	0	0	<b>2.05</b>	0	0
		B	<b>2.95</b>	0	<b>1.3</b>	<b>1.4</b>	0	0
		C	<b>2.95</b>	0	<b>1.2</b>	<b>1.65</b>	0	0
		D	<b>2.8</b>	0	<b>1.2</b>	<b>1.4</b>	0	0
	4	(blank)	<b>2.4</b>	0	<b>1.1</b>	<b>1.55</b>	0	0
NF-3A	2	A	0	0	0	0	0	0
		B	0	0	0	0	0	0
		C	0	0	0	0	0	0
		D	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0
NF-4	2	A	0	0	0	0	0	0
		B	0	0	0	0	0	0
		C	0	0	0	0	0	0
		D	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0
NF-5A	2	A	0	0	0	0	0	0
		B	0	0	0	0	0	0
		C	0	0	0	0	0	0
		D	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0
NF-6	2	A	0	0	0	0	0	0
		B	0	0	0	0	0	0
		C	0	0	0	0	0	0
		D	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0
NF-7	2	A	0	0	<b>1.15</b>	<b>2</b>	0	0
		B	0	0	<b>0.95</b>	<b>1.85</b>	0	0
		C	0	0	<b>1</b>	<b>1.85</b>	0	0
		D	0	0	<b>1.05</b>	<b>2.1</b>	0	0
	4	(blank)	0	0	0	0	0	0
NF-8	2	A	<b>9.65</b>	<b>1.4</b>	<b>60.3</b>	0	0	0
		B	<b>8.45</b>	<b>1.15</b>	<b>53.5</b>	0	0	0
		C	<b>9.1</b>	<b>1.25</b>	<b>57.4</b>	0	0	0
		D	<b>8.65</b>	<b>0.95</b>	<b>51.4</b>	0	0	0
	4	(blank)	<b>9.15</b>	<b>1.25</b>	<b>48.4</b>	0	0	0
NF-9	2	A	0	0	0	0	0	0
		B	0	0	0	0	0	0
		C	0	0	0	0	0	0
		D	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0

**MPM Silicones LLC - Sistersville Site**  
**RCRA Corrective Action Program 2008 Groundwater Monitoring - South Inactive Site**

			1,1,1- Trichloroethane	1,1- Dichloroethane	1,2- Dichloroethane	Acrylonitrile	Benzene	Chlorobenzene	Dichloroethylene (cis-1,2)	Dichloroethylene (-trans-1,2)	Ethylbenzene	m,p- Xylene	Methyl chloride	o- Xylene	Toluene
Well	Quarter	Replicate	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2701-R	3	(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0
5701	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0
		B	0	0	0	0	0	0	0	0	0	0	0	0	0
		C	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	A	0	0	0	0	0	0	0	0	0	0	0	0	0
		B	0	0	0	0	0	0	0	0	0	0	0	0	0
		C	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0
5702	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0
		B	0	0	0	0	0	0	0	0	0	0	0	0	0
		C	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	A	0	0	0	0	0	0	0	0	0	0	0	0	0
		B	0	0	0	0	0	0	0	0	0	0	0	0	0
		C	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0
5703	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0
		B	0	0	0	0	0	0	0	0	0	0	0	0	0
		C	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	A	0	0	0	0	0	0	0	0	0	0	0	0	0
		B	0	0	0	0	0	0	0	0	0	0	0	0	0
		C	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0
5704	1	A	0	0	0	0	0	0	<b>2.75</b>	0	0	0	0	0	0
		B	0	0	0	0	0	0	<b>2.8</b>	0	0	0	0	0	0
		C	0	0	0	0	0	0	<b>2.8</b>	0	0	0	0	0	0
		D	0	0	0	0	0	0	<b>2.2</b>	0	0	0	0	0	0
	2	A	0	0	0	0	<b>14</b>	0	<b>4.95</b>	0	0	0	0	0	0
		B	0	0	0	0	<b>12.5</b>	0	<b>4.8</b>	0	0	0	0	0	0
		C	0	0	0	0	<b>7.8</b>	0	<b>3.95</b>	0	0	0	0	0	0
		D	0	0	0	0	<b>6.4</b>	0	<b>3.65</b>	0	0	0	0	0	0
	3	(blank)	0	0	0	0	<b>6.6</b>	0	<b>3.4</b>	0	0	0	0	0	0
	4	(blank)	0	0	0	0	<b>8.95</b>	0	<b>13.5</b>	0	0	0	0	0	0
5705	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0
		B	0	0	0	0	0	0	0	0	0	0	0	0	0
		C	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	A	0	0	0	0	0	0	0	0	0	0	0	0	0
		B	0	0	0	0	0	0	0	0	0	0	0	0	0
		C	0	0	0	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0

*Note: Well 5702 was dry and could not be sampled in the 3rd quarter. Wells 5702 & 5705 were dry and could not be sampled in the 4th quarter*

**MPM Silicones LLC - Sistersville Site**  
**RCRA Corrective Action Program 2008 Groundwater Monitoring - No. 3 Sludge Pond & BTEX Area**

			Benzene	Chlorobenzene	Dichloroethylene (cis-1,2)	Dichloroethylene (-trans-1,2)
Well	Quarter	Replicate	ug/l	ug/l	ug/l	ug/l
20	1	A	0	<b>2.05</b>	<b>3.15</b>	0
		B	0	<b>1.85</b>	<b>2.6</b>	0
		C	0	<b>1.65</b>	<b>2.3</b>	0
		D	0	<b>1.4</b>	<b>2.05</b>	0
	2	A	0	<b>2.35</b>	<b>3.5</b>	0
		B	0	<b>2.25</b>	<b>3.15</b>	0
		C	0	<b>2.4</b>	<b>3.55</b>	0
		D	0	<b>2.25</b>	<b>3.15</b>	0
	3	(blank)	0	<b>2.75</b>	<b>3.15</b>	0
	4	(blank)	0	<b>2.3</b>	0	0
3203	1	A	0	0	0	0
		B	0	0	0	0
		C	0	0	0	0
		D	0	0	0	0
	2	A	0	0	0	0
		B	0	0	0	0
		C	0	0	0	0
		D	0	0	0	0
	3	(blank)	0	0	0	0
	4	(blank)	0	0	0	0